

In The Claims

1. (Canceled)
2. (Canceled)
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12. (Canceled)
13. (Currently Amended) A logic tree for steering electromagnetic energy comprising a plurality of stages, the first of said stages including a branch for directing said energy to a similar branch in each succeeding stage, each of said stages containing 2^{n-1} branches where n is a stage number corresponding to one of said plurality of stages. A logic tree according to claim 12 wherein each of said branches ~~includes~~ including an active element for directing said electromagnetic energy into one of first and second paths and a passive element disposed in said second path for directing said electromagnetic energy

into a path parallel to said first path when said energy is directed into said second path.

14. (Original) A logic tree according to claim 13 further including a source of said electromagnetic energy having a given wavelength and circular polarization coupled to said element of said first stage.
15. (Original) A logic according to claim 14 wherein said active element includes an element transmissive to said given wavelength and circular polarization and reflective to said given wavelength and to a circular polarization opposite to said given circular polarization.
16. (Original) A logic tree according to claim 14 wherein said passive element includes an element reflective to said given wavelength and a circular polarization opposite to said given circular polarization.
17. (Original) A logic tree according to claim 14 wherein said active element includes phase shifter means disposed in electromagnetically coupled relationship with said active element.
18. (Original) A logic tree according to claim 14 wherein said active element includes an element made of cholesteric liquid crystal material.
19. (Original) A logic tree according to claim 14 wherein said passive element includes an element made of cholesteric liquid crystal material.
20. (Original) A logic tree according to claim 14 further including a programmable pulsed source connected to said active element.

21. (Original) A logic tree according to claim 14 further including means connected to said source of electromagnetic energy for modulating said source.
22. (Original) A logic tree according to claim 14 further including half-wave retrarders disposed in electromagnetically coupled relationship with selected of said active and passive elements of the last stage of said plurality of stages to convert said electromagnetic energy emanating from said active and passive elements to a single circular polarization.
23. (Original) A logic tree according to claim 17 wherein said phase shifter means includes a phase shifting material responsive to different potential levels for switching said phase shifting material between states which switch incident electromagnetic energy between said given polarization and said opposite polarization.
24. (Original) A logic tree according to claim 23 wherein said phase shifting means further includes means for applying said different potential levels to said phase shifter material.
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31. (Canceled)

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